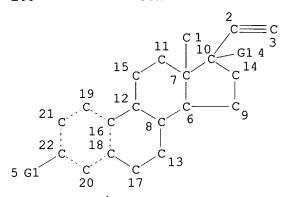
=> d que stat 157 L44 STR



S~Ak @23 24

VAR G1=23/OH NODE ATTRIBUTES: DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES: RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 24

STEREO ATTRIBUTES: NONE

L47	649	SEA	FILE=REGISTRY	SSS FUL	L44	
L50	33	SEA	FILE=REGISTRY	ABB=ON	L47	AND S=1
L52	20	SEA	FILE=REGISTRY	ABB=ON	L47	AND S>1
L53	53	SEA	FILE=REGISTRY	ABB=ON	L50	OR L52
L54	48	SEA	FILE=REGISTRY	ABB=ON	L53	NOT "SULFONYL"
L55	19	SEA	FILE=REGISTRY	ABB=ON	L54	AND NRS=1
L56	1	SEA	FILE=REGISTRY	ABB=ON	L55	AND C23H30OS/MF
L57	1	SEA	FILE=HCAPLUS A	ABB=ON	L56	

=> d his 135-159

```
(FILE 'HCAPLUS' ENTERED AT 13:25:26 ON 09 OCT 2002)
    FILE 'REGISTRY' ENTERED AT 13:53:51 ON 09 OCT 2002
          1308 S 4432.3.65/RID AND NRS=1 AND S=1
L35
L36
           12 S L35 AND "ETHYNYL"
           119 S 4432.3.65/RID AND NRS=1 AND S>1
L37
L38
             O S L37 AND "ETHYNYL"
           110 S 4432.3.65/RID AND NRS=1 AND S=2
L39
          119 S L37 OR L39
L40
          1427 S L35 OR L37
L41
      1285 S L41 NOT "SULFONATE"
L42
            4 S L42 AND "ETHYNYL"
L43
              STRUCTURE sae done stat 157, attached
L44
L45
            39 S L44
L46
             7 S L45 AND "ETHYNYL"
L47
           649 S L44 FULL
L48
           90 S L47 AND "ETHYNYL"
L49
            1 S L48 AND "THIO"
L50
            33 S L47 AND S=1
            29 S L50 NOT "SULFONYL"
L51
L52
            20 S L47 AND S>1
            53 S L50 OR L52
L53
           L54
L55
L56
    FILE 'HCAPLUS' ENTERED AT 14:50:01 ON 09 OCT 2002
             1 S L56 / Cit from CAPlus - art ac Lod
L57
    FILE 'CAOLD' ENTERED AT 14:51:13 ON 09 OCT 2002
0 S L56 Oct from CAOL
L58
    FILE 'BEILSTEIN' ENTERED AT 15:23:59 ON 09 OCT 2002
0 S L57 Ocili from Beilekein
L59
```

=> d ibib abs hitstr 1

L57 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1975:497692 HCAPLUS

DOCUMENT NUMBER: 83:97692

TITLE: Steroids. 14. Sulfur-containing estratrienes

AUTHOR(S): Schwarz, S.; Weber, G.

CORPORATE SOURCE: Wiss. Lab., VEB Jenapharm, Jena, E. Ger.

SOURCE: Pharmazie (1975), 30(5), 277-80

CODEN: PHARAT

DOCUMENT TYPE: Journal LANGUAGE: German

GI For diagram(s), see printed CA Issue.

Estrone dimethylthiocarbamate was hydrolyzed by alk. MeOH-H2O to give thioestrone (I) and the disulfide II (RR1 = 0). I underwent successive NaBH4 redn., S-alkylation with Me2CHBr, Oppenauer oxidn., and condensation with KC.tplbond.CH to give 3-(isopropylthio)-17-ethynylestra-1,3,5(10)-trien-17.beta.-ol (III). Oxidn. of 3-(isopropylthio)estra-1,3,5(10)-trien-17-one (IV) by excess H2O2 and subsequent condensation with KC.tplbond.CH gave 3-(isopropylsulfonyl)-17-ethynylestra-1,3,5(10)trien-17.beta.-ol (V). The R- and S-isomers of VI were prepd. from IV by oxidn. with 1 equiv. H2O2 and reaction with KC.tplbond.CH, and NaBH4 redn. of I (RR1 = 0) gave II (R = HO, R1 = H). III, R-VI, S-VI, and V possessed little or no antigonadotropic activity, but were post-coital contraceptives in rats with their activity decreasing in the order given. III also possessed anticholesteremic activity in rats.

IT 56786-41-5P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. and post-coital contraceptive activity of)

RN 56786-41-5 HCAPLUS

CN 19-Norpregna-1,3,5(10)-trien-20-yn-17-ol, 3-[(1-methylethyl)thio]-, (17.alpha.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Peselev 09/675,323

09/10/2002

=> d ibib abs hitstr 1-2

L34 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2002 ACS 2001:247354 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER:

134:261560

TITLE:

Therapeutic treatment of androgen receptor driven

conditions using steroids or analogs

Lardy, Henry A.; Marwah, Padma INVENTOR(S):

Hollis-Eden Pharmaceuticals, Inc., USA PATENT ASSIGNEE(S):

SOURCE:

PCT Int. Appl., 88 pp.

CODEN: PIXXD2 Patent

DOCUMENT TYPE: LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

```
PATENT NO.
                      KIND
                            DATE
                                            APPLICATION NO.
                                                              DATE
                            _____
                      ____
                       A2
     WO 2001023405
                             20010405
                                            WO 2000-US26848 20000928
                             20020530
    WO 2001023405
                      A3
         W: AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH,
             CN, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EE, EE, ES, FI, FI,
             GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR,
             KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX,
             MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM,
             TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD,
             RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     AU 2000077363
                       Α5
                             20010430
                                           AU 2000-77363
                                                              20000928
                                            EP 2000-967114
     EP 1228083
                       Α2
                             20020807
                                                              20000928
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL
PRIORITY APPLN. INFO.:
                                         US 1999-157275P P 19990930
                                         US 1999-157347P P 19990930
                                         US 1999-166116P P 19991116
                                         WO 2000-US26848 W 20000928
```

OTHER SOURCE(S): MARPAT 134:261560

A method is claimed to treat or prevent an androgen responsive disease in a subject, or to ameliorate one or more symptoms thereof, comprising administering to a subject, or delivering to the subject's tissues, an effective amt. of a steroid or steroid analogs. The steroid is specifically an analog of 1,3,5(10)-estratriene-17.alpha.ethynyl-3.beta., 17.beta.-diol; 17.alpha.-ethynylandrostene -3.beta., 17.beta.-diol; 3.beta., 17.beta.-dihydroxyandrost-5-en-16-one; or 3.beta.-methylcarbonate-androst-5-en-7,17-dione. The androgen responsive disease is prostate cancer, benign prostatic hyperplasia, breast cancer, alopecia, acne, hypogonadism or hirsutism. The method further comprises administering to the subject a second therapy; the second therapeutic agent is hydroxyflutamide, leuprolide, megesterol, diethylstilbesterol, aminoglutethimide, spironolactone, tamoxifen, cyproterone acetate, or bicalutamide.

57-63-6DP, analogs 1159-66-6DP, 3.beta., 17.beta.-Dihydroxyandrost-5-en-16-one, analogs 3604-60-2DP, analogs 250163-05-4DP, analogs

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(therapeutic treatment of androgen receptor driven conditions using steroids or analogs)

RN 57-63-6 HCAPLUS

CN 19-Norpregna-1,3,5(10)-trien-20-yne-3,17-diol, (17.alpha.)- (9CI) (CF INDEX NAME)

Absolute stereochemistry.

RN 1159-66-6 HCAPLUS

CN Androst-5-en-16-one, 3,17-dihydroxy-, (3.beta.,17.beta.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 3604-60-2 HCAPLUS

CN Pregn-5-en-20-yne-3,17-diol, (3.beta.,17.alpha.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 250163-05-4 HCAPLUS

CN Androst-5-ene-7,17-dione, 3-[(methoxycarbonyl)oxy]-, (3.beta.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 52-01-7, Spironolactone 56-53-1 125-84-8,
 Aminoglutethimide 427-51-0, Cyproterone acetate
 3562-63-8 10540-29-1, Tamoxifen 52806-53-8,
 Hydroxyflutamide 53714-56-0, Leuprolide 90357-06-5,
 Bicalutamide

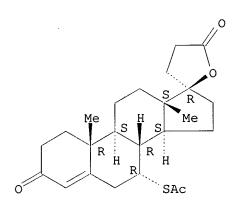
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(therapeutic treatment of androgen receptor driven conditions using steroids or analogs in combination with a second therapeutic agent)

RN 52-01-7 HCAPLUS

CN Pregn-4-ene-21-carboxylic acid, 7-(acetylthio)-17-hydroxy-3-oxo-, .gamma.-lactone, (7.alpha.,17.alpha.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 56-53-1 HCAPLUS

CN Phenol, 4,4'-[(1E)-1,2-diethyl-1,2-ethenediyl]bis- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 125-84-8 HCAPLUS

CN 2,6-Piperidinedione, 3-(4-aminophenyl)-3-ethyl- (9CI) (CA INDEX NAME)

RN 427-51-0 HCAPLUS

CN 3'H-Cyclopropa[1,2]pregna-1,4,6-triene-3,20-dione, 17-(acetyloxy)-6-chloro-1,2-dihydro-, (1.beta.,2.beta.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 3562-63-8 HCAPLUS

CN Pregna-4,6-diene-3,20-dione, 17-hydroxy-6-methyl- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 10540-29-1 HCAPLUS

CN Ethanamine, 2-[4-[(1Z)-1,2-diphenyl-1-butenyl]phenoxy]-N,N-dimethyl- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 52806-53-8 HCAPLUS

CN Propanamide, 2-hydroxy-2-methyl-N-[4-nitro-3-(trifluoromethyl)phenyl]-(9CI) (CA INDEX NAME)

RN 53714-56-0 HCAPLUS

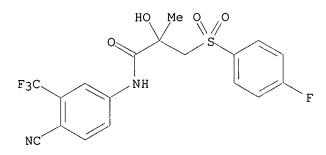
CN 1-9-Luteinizing hormone-releasing factor (swine), 6-D-leucine-9-(N-ethyl-L-prolinamide)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

PAGE 1-B

RN 90357-06-5 HCAPLUS

Propanamide, N-[4-cyano-3-(trifluoromethyl)phenyl]-3-[(4-CN fluorophenyl)sulfonyl]-2-hydroxy-2-methyl- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L34 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1999:684497 HCAPLUS

DOCUMENT NUMBER: 131:332293

Suppression of .DELTA.5-androstenediol-induced TITLE:

androgen receptor transactivation by selective steroids in human prostate cancer cells

AUTHOR(S): Chang, Hong-Chiang; Miyamoto, Hiroshi; Marwah,

Padma; Lardy, Henry; Yeh, Shuyuan; Huang, Ko-En; Chang, Chawnshang

CORPORATE SOURCE:

George Whipple Laboratory for Cancer Research, Departments of Pathology, Urology, Radiation Oncology, and the Cancer Center, University of Rochester Medical Center, Rochester, NY, 14642, USA

Proceedings of the National Academy of Sciences of the SOURCE:

United States of America (1999), 96(20), 11173-11177

CODEN: PNASA6; ISSN: 0027-8424

PUBLISHER: National Academy of Sciences

DOCUMENT TYPE: Journal LANGUAGE: English

The authors' earlier report suggested that androst-5-ene-3.beta., 7.beta.diol (.DELTA.5-androstenediol or Adiol) is a natural hormone with

androgenic activity and that two potent anti-androgens, hydroxyflutamide (Eulexin) and bicalutamide (Casodex), fail to block completely the Adiol-induced androgen receptor (AR) transactivation in prostate cancer cells. Here, the authors report the development of a reporter assay to screen several selective steroids with anti-Adiol activity. Among 22 derivs./metabolites of dehydroepiandrosterone, the authors found 4 steroids [no. 4, 1,3,5(10)-estratriene-17.alpha.-ethynyl -3,17.beta.-diol; no. 6, 17.alpha.-ethynyl-androstene-diol; no. 8, 3.beta., 17.beta.-dihydroxy-androst-5-ene-16-one; and no. 10, 3.beta.-methylcarbonate-androst-5-ene-7,17-dione] that have no androgenic activity and could also block the Adiol-induced AR transactivation in prostate cancer PC-3 cells. Interestingly, these compds., in combination with hydroxyflutamide, further suppressed the Adiol-induced AR transactivation. Reporter assays further showed that these four anti-Adiol steroids have relatively lower glucocorticoid, progesterone, and estrogenic activity. Together, these data suggest some selective steroids might have anti-Adiol activity, which may have potential clin. application in the battle against the androgen-dependent prostate cancer

IT 521-17-5, .DELTA.5-Androstenediol 52806-53-8,

Hydroxyflutamide

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(androstenediol-induced androgen receptor transactivation suppression by selective steroids in human prostate cancer cells)

RN 521-17-5 HCAPLUS

CN Androst-5-ene-3,17-diol, (3.beta.,17.beta.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 52806-53-8 HCAPLUS

CN Propanamide, 2-hydroxy-2-methyl-N-[4-nitro-3-(trifluoromethyl)phenyl](9CI) (CA INDEX NAME)

IT 53-43-0D, Dehydroepiandrosterone, metabolites 57-63-6

1159-66-6 3604-60-2 250163-05-4

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(androstenediol-induced androgen receptor transactivation suppression by selective steroids in human prostate cancer cells)

RN 53-43-0 HCAPLUS

CN Androst-5-en-17-one, 3-hydroxy-, (3.beta.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 57-63-6 HCAPLUS

CN 19-Norpregna-1,3,5(10)-trien-20-yne-3,17-diol, (17.alpha.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 1159-66-6 HCAPLUS

CN Androst-5-en-16-one, 3,17-dihydroxy-, (3.beta.,17.beta.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 3604-60-2 HCAPLUS

CN Pregn-5-en-20-yne-3,17-diol, (3.beta.,17.alpha.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 250163-05-4 HCAPLUS

CN Androst-5-ene-7,17-dione, 3-[(methoxycarbonyl)oxy]-, (3.beta.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

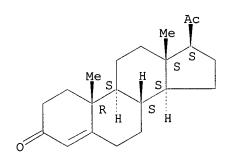
IT 57-83-0, Progesterone, biological studies

RL: BSU (Biological study, unclassified); BIOL (Biological study) (androstenediol-induced androgen receptor transactivation suppression by selective steroids in human prostate cancer cells)

RN 57-83-0 HCAPLUS

CN Pregn-4-ene-3,20-dione (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT:

THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT